

A Market-Based State Regulation to Achieve Nitrogen Oxides (NO_x) Reductions from Distributed Generation (DG) Sources

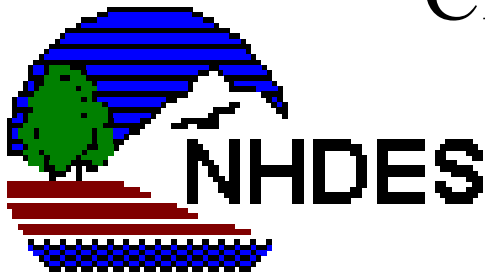
Joe Fontaine, Trading Programs Manager

jfontaine@des.state.nh.us

New Hampshire Department of Environmental Services

www.des.state.nh.us

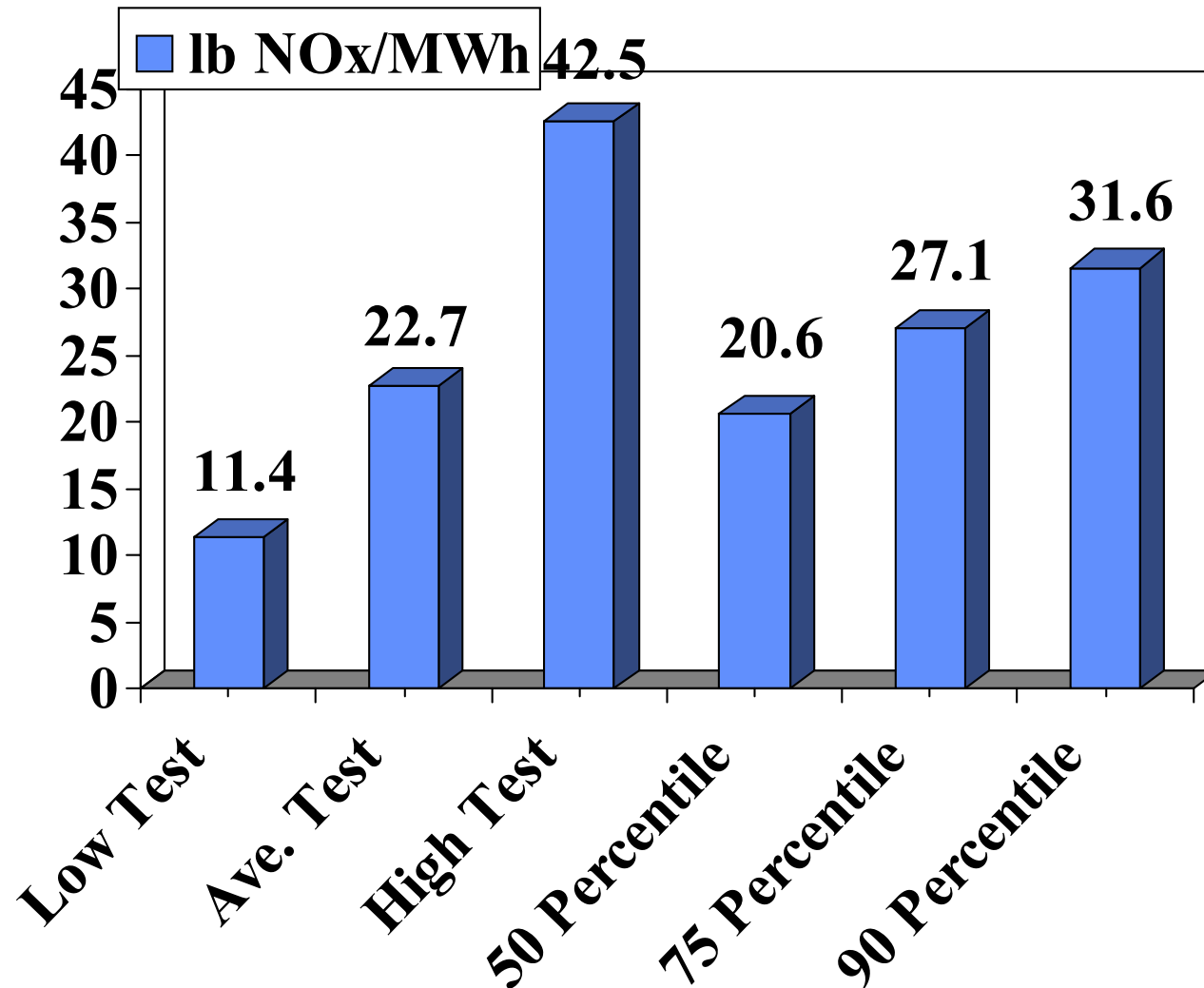
SIP Innovations Conference:
Clearing the Path to Clean Air
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Purpose of NH Rule Env-A 3700

- Subject smaller uncontrolled fossil fuel fired power generation equipment (i.e., diesel internal combustion engines) to NOx emission reduction requirements in order to contribute their fair share
 - Larger electricity generation equipment (i.e., NOx budget sources) have already significantly reduced their NOx emissions and will be required to reduce more
- Minimize the incentive for installation of this type of generation
- Provide for lower cost implementation by establishing an Economic Incentive Program

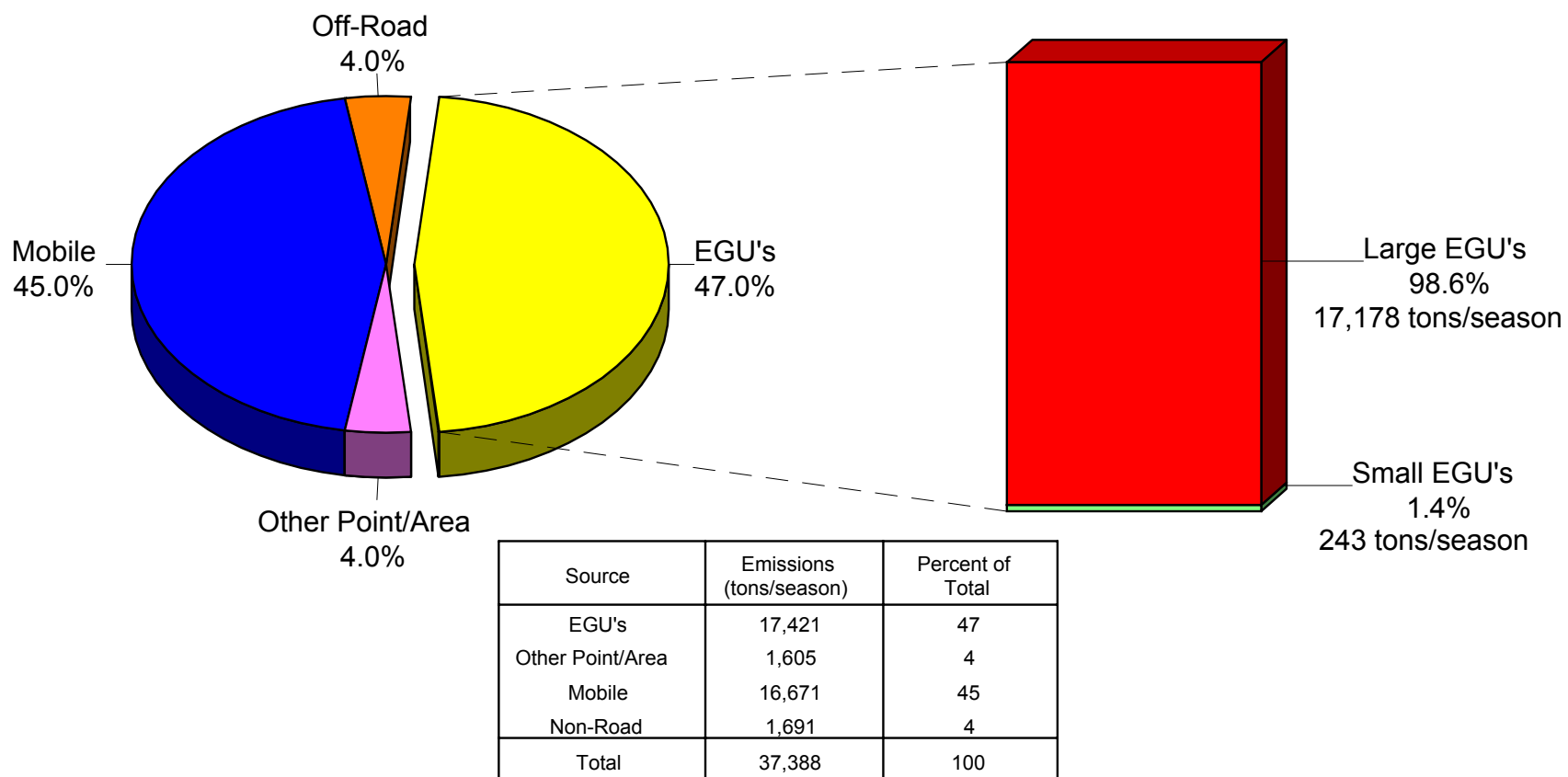
NO_x Emissions from IC Engines Based on 45 Stack Tests



Emissions Summary - Large vs. Small EGUs

1993 Statewide Anthropogenic

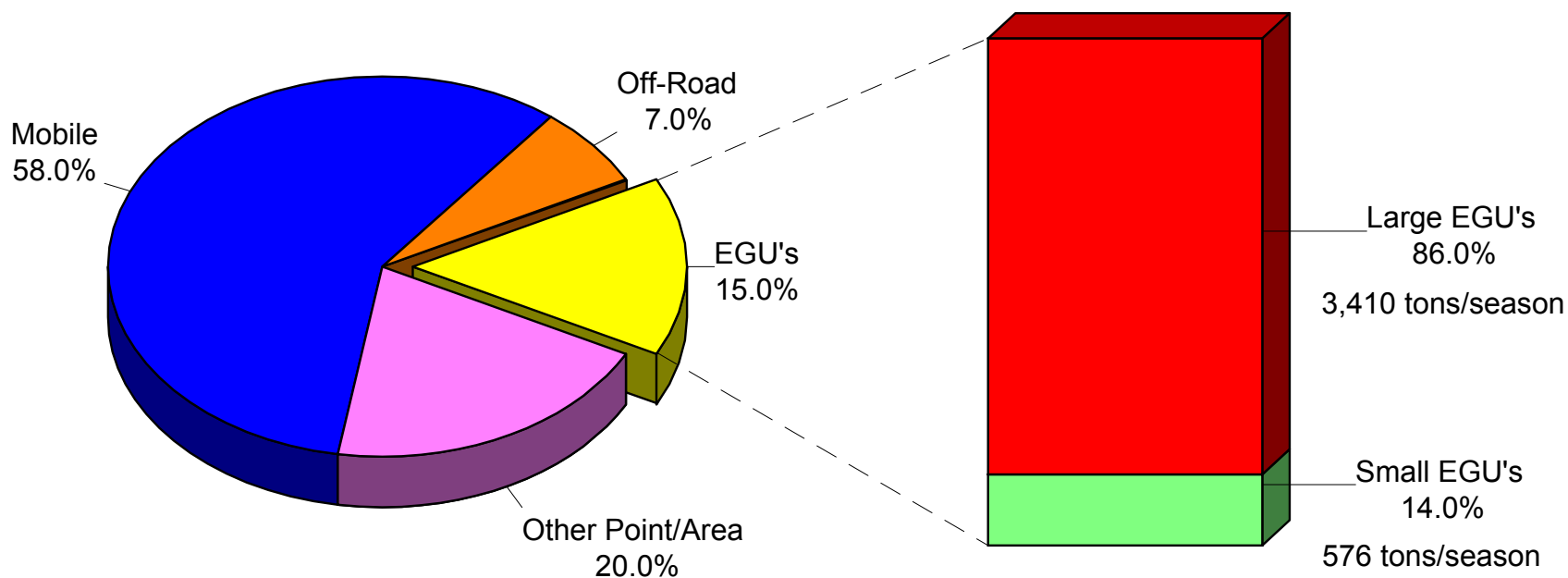
NOx Emissions



Source: NHDES-ARD 1993 Criteria Pollutant Emissions Inventory

Emissions Summary - Large vs. Small EGUs

1999 Statewide Anthropogenic NOx Emissions in New Hampshire Ozone Season



Source	Emissions (tons/season)	Percent of Total
EGU's	3,986	15
Other Point/Area	5,391	20
Mobile	15,233	58
Non-Road	1,742	7
Total	26,352	100

Source: NHDES-ARD Estimated 1999 Criteria Pollutant Emissions Inventory

Options for Action

- Conventional rulemaking via emergency rules or regular rules using existing statutory authority, or
- New innovative program through legislation
- NHDES decided to pursue a new “market-based” approach through legislation resulting in House Bill 649 in 1999
- NHDES adopted regulation Env-A 3700 effective December 20, 2001

NH Rule Env-A 3700 Applicability

- New sources immediately
- Existing sources after either of two grandfather periods ending November 2005 or November 2007, based on their permit issuance date
 - Replacement sources receive the balance of the respective grandfather period

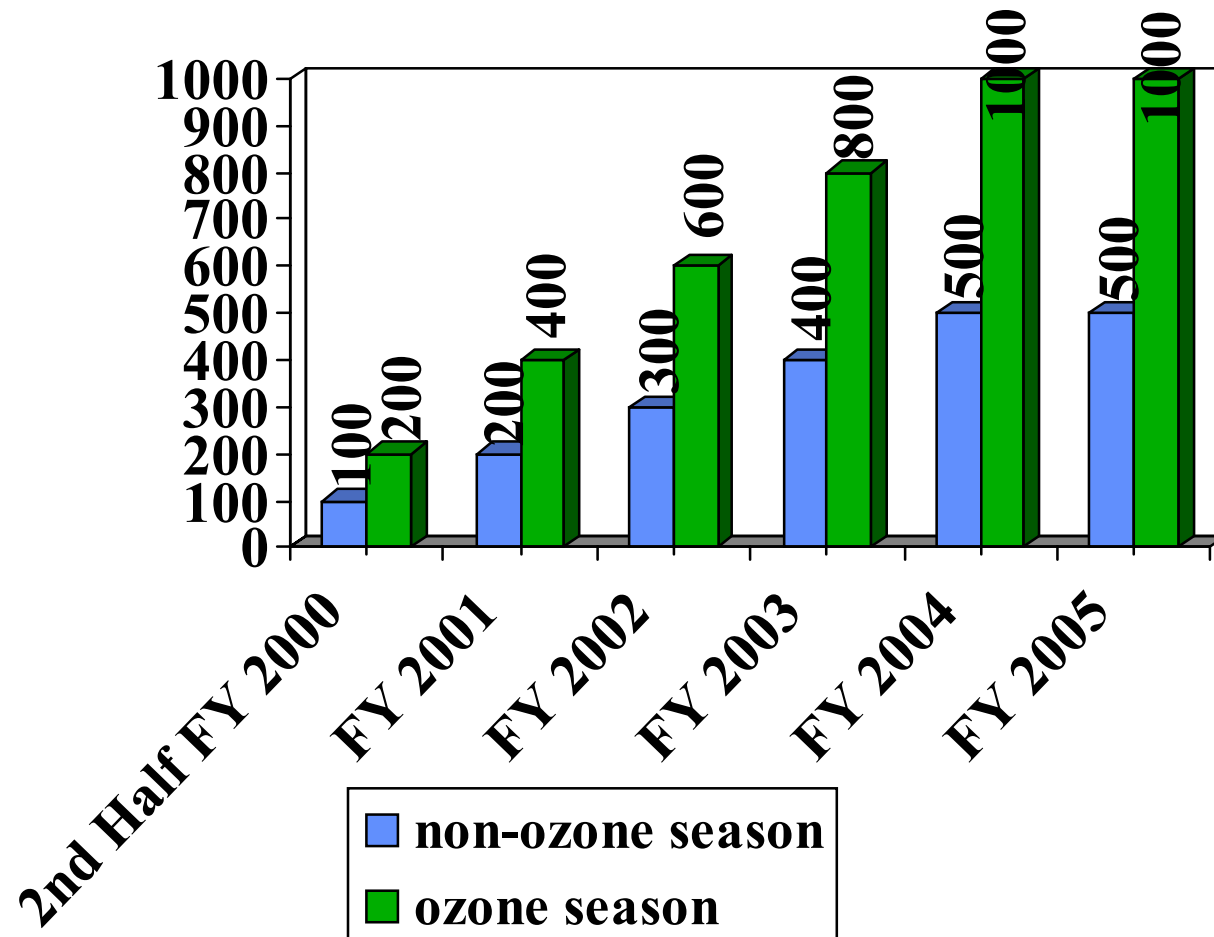
NH Rule Env-A 3700 Exemptions

- Emergency generators
- Start-up or temporary generators
- Portable generators
- Generators with facility-wide NO_x emissions less than or equal to 5 tons per year
- Generators in areas where electrical power is not “reasonably or reliably” available

NH Rule Env-A 3700 Requirements

- Report NOx emissions (tons)
- Report power production (KWh)
- Acquire NOx emissions reductions credits or pay emission based fees in lieu of acquiring credits
 - First 7 lb NOx/MWh is exempt
 - Higher fees for NOx emissions during ozone season
 - NOx emission based fees increase over initial 5 years until capped at \$1,000/ozone season ton & \$500/non-ozone season ton

Non-exempt \$/ton NO_x Emissions Fees



NOx Emissions Reduction Fund

- All fees are deposited into a special fund
- Fund moneys may be used for:
 - ✓ Acquisition/retirement of NOx emissions reductions credits;
 - ✓ Financial aid for control technology installation; and
 - ✓ Refunds to sources in proportion to their electric generation.